2006-08 SUSPENSION

Rear Suspension - Civic (All Except Hybrid)

KNUCKLE/HUB BEARING UNIT REPLACEMENT

EXPLODED VIEW-DISC BRAKE TYPE

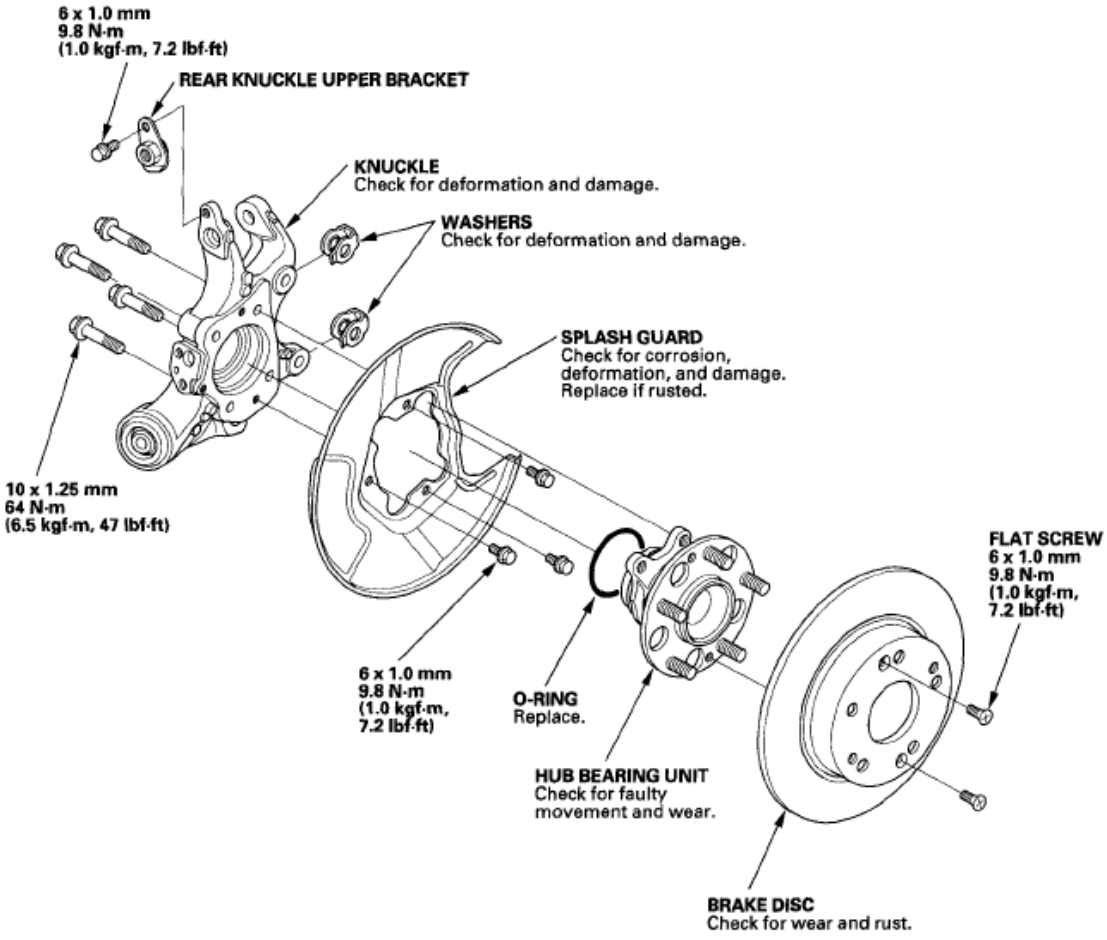

Fig. 1: Exploded View Of Disc Brake Type (With Torque Specifications)

EXPLODED VIEW-DRUM BRAKE TYPE

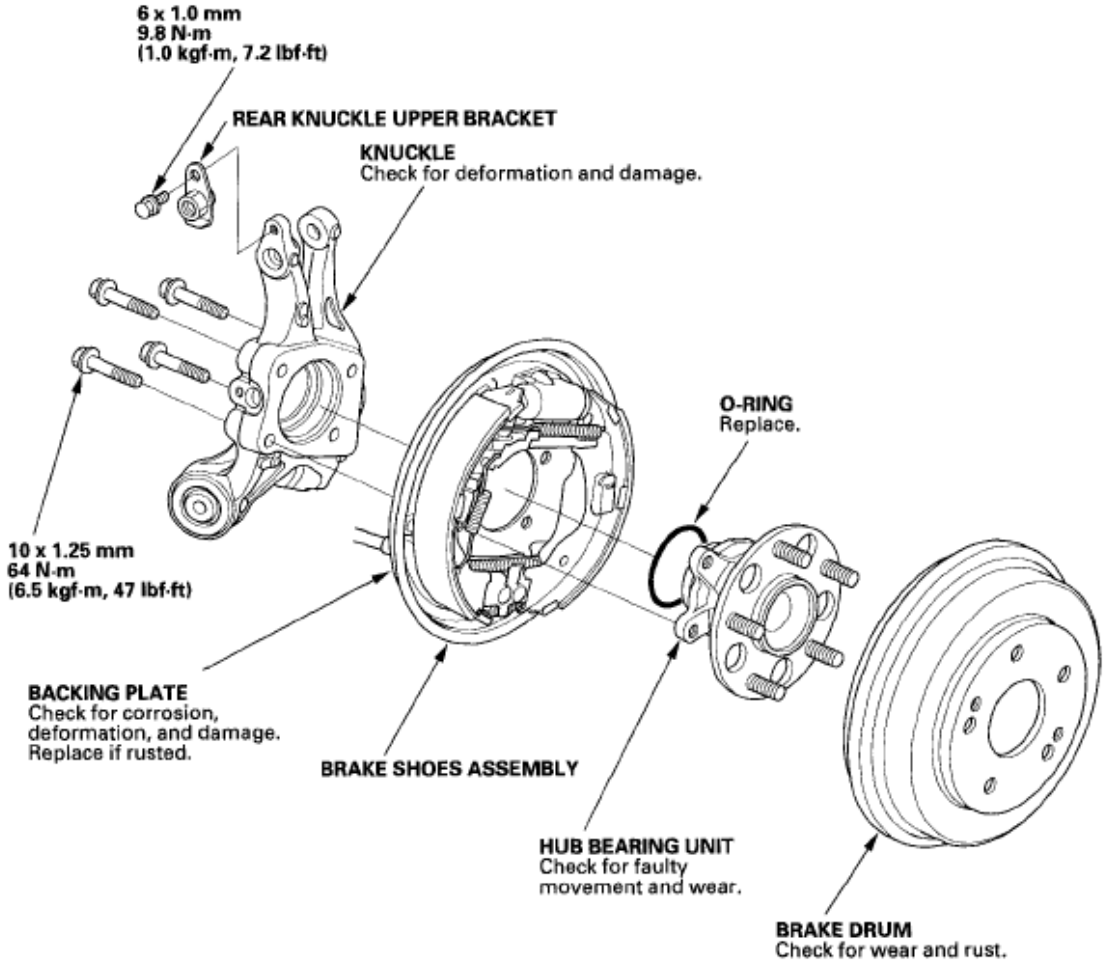

Fig. 2: Exploded View Of Drum Brake Type (With Torque Specifications)

HUB BEARING UNIT REPLACEMENT-DISC BRAKE TYPE

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the wheel nuts (A) and the rear wheel.

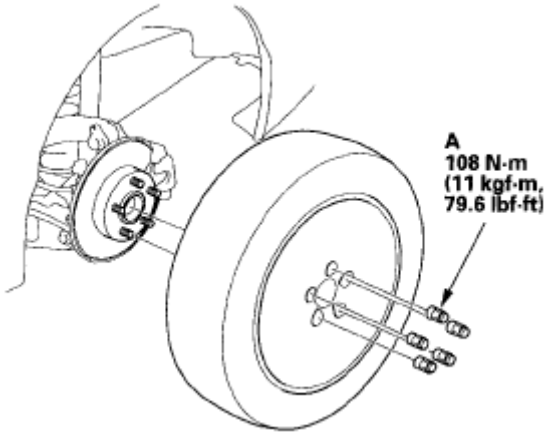

Fig. 3: Identifying Wheel Nuts And Rear Wheel (With Torque Specifications)

3. Remove the brake hose bracket mounting bolt (A) from the knuckle.

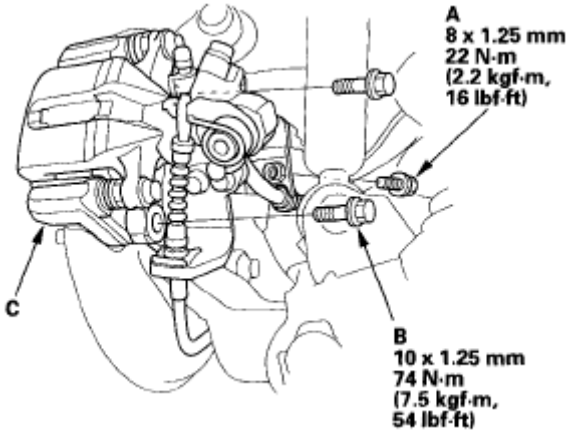

Fig. 4: Identifying Brake Hose Bracket Mounting Bolt From Knuckle (With Torque Specifications)

4. Remove the brake caliper bracket mounting bolts (B), and remove the caliper assembly (C) from the knuckle. To prevent damage to the caliper assembly or brake hose, use a short piece of wire to hang the caliper assembly from the undercarriage. Do not twist the brake hose excessively.
5. Remove the two washers (A).

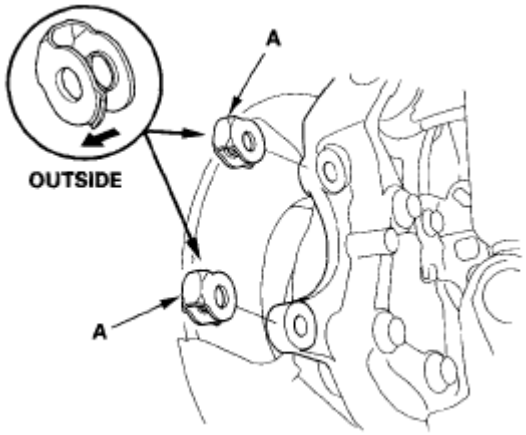

Fig. 5: Identifying Two Washers

6. Remove the 6 mm brake disc retaining screws (A).

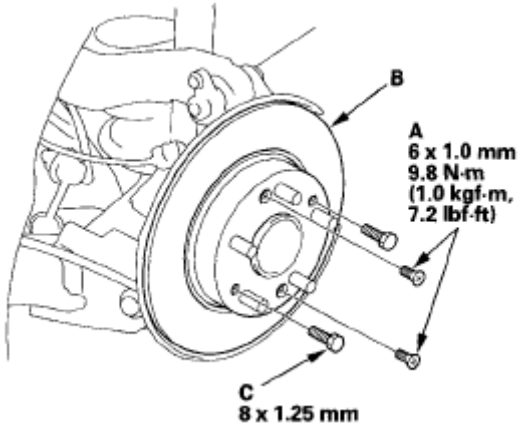

Fig. 6: Identifying Brake Disc Retaining Screws (With Torque Specifications)

7. Remove the brake disc (B) from the hub bearing unit.

NOTE: If the brake disc has clung to the hub bearing unit. Screw two 8 x 1.25 mm bolts (C) into the brake disc to push it away from the hub bearing unit. Turn each bolt 90 degrees at a time to prevent cocking the brake disc.

8. Remove the hub bearing unit (A) and the O-ring (B).

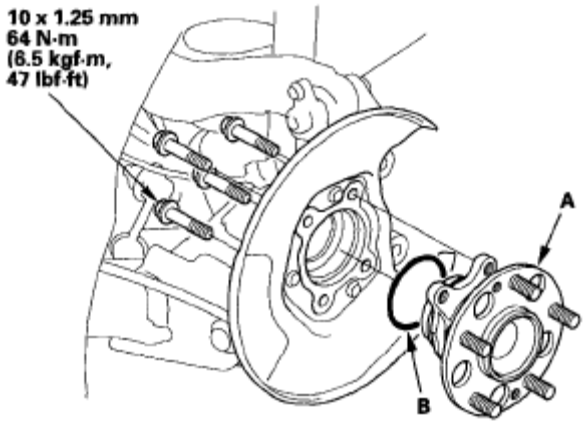

Fig. 7: Identifying Hub Bearing Unit And O-Ring (With Torque Specifications)

9. Check the hub bearing unit for damage and cracks.
10. Install the hub bearing unit in the reverse order of removal, and note these items:
    - Use a new O-ring during reassembly.
    - Tighten all mounting hardware to the specified torque values.
    - Before installing the brake disc, Clean the matching surface of the hub bearing unit and inside of the brake disc.
    - Before installing the wheel, clean the mating surface of the brake disc and the inside of the wheel.
    - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

HUB BEARING UNIT REPLACEMENT-DRUM BRAKE TYPE

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the wheel nuts (A) and the rear wheel.

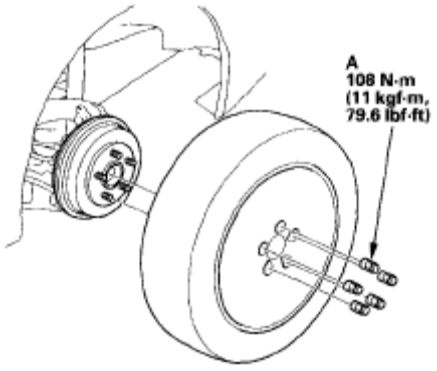

Fig. 8: Identifying Wheel Nuts And Rear Wheel (With Torque Specifications)

3. Release the parking brake, and remove the brake drum (A) from the hub bearing unit.

NOTE:

- **If necessary, turn the adjuster bolt (B) with a flat-tip screwdriver until the shoes become loose.**
- **If the brake drum has clung to the hub bearing unit. Screw two 8 x 1.25 mm bolts (C) into the brake drum to push it away from the hub bearing unit. Turn each bolt 90 degrees at a time to prevent cocking the brake drum.**
- **After installation, press the brake pedal several times to make sure the brakes work and self adjust the brake shoes.**

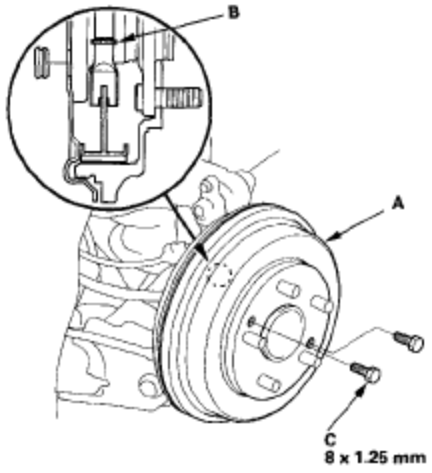

Fig. 9: Identifying Brake Drum And Adjuster Bolt

4. Remove the hub bearing unit (A) and the O-ring (B).

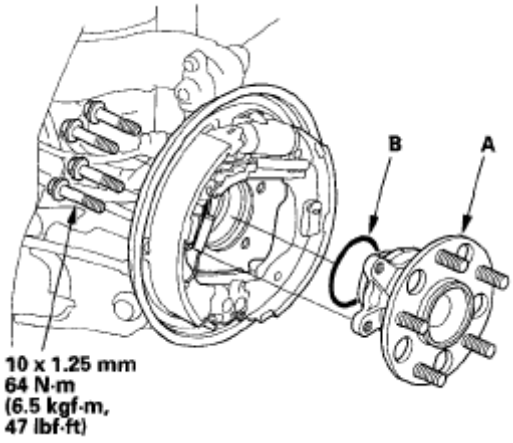

Fig. 10: Identifying Hub Bearing Unit And O-Ring (With Torque Specifications)

5. Check the hub bearing unit for damage and cracks.
6. Install the hub bearing unit in the reverse order of removal, and note these items:
   - Use a new O-ring during reassembly.
   - Tighten all mounting hardware to the specified torque values.
   - Before installing the brake drum, clean the matching surface of the hub bearing unit and inside of the brake drum.

- Before installing the wheel, clean the mating surface of the brake drum and the inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

KNUCKLE REPLACEMENT-DISC BRAKE TYPE

1. Remove the hub bearing unit.
2. Remove the splash guard (A).

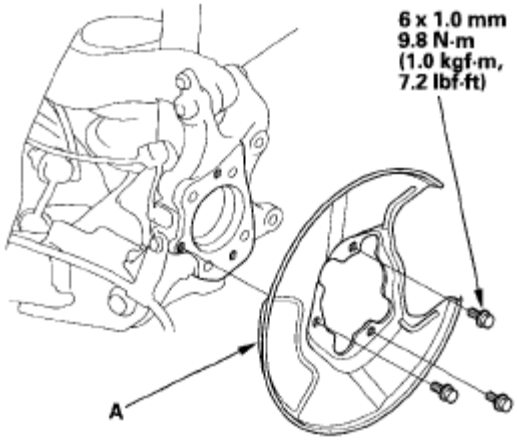

Fig. 11: Identifying Splash Guard (With Torque Specifications)

3. Remove the wheel sensor (A), and the brake hose mounting bracket (B) from the knuckle (C). Do not disconnect the wheel sensor connector.

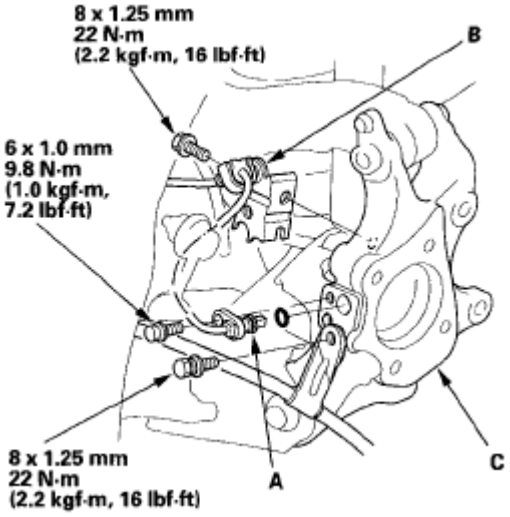

Fig. 12: Identifying Wheel Sensor And Brake Hose Mounting Bracket From Knuckle (With Torque Specifications)

4. Place a floor jack under the trailing arm to support it.

NOTE: Do not place the jack against the plate section of the lower arm. Be careful not to damage any suspension components.

5. Remove the upper arm mounting bolt (A), and disconnect the upper arm (B) from the knuckle.

NOTE: Use the new upper arm mounting bolt during reassembly.

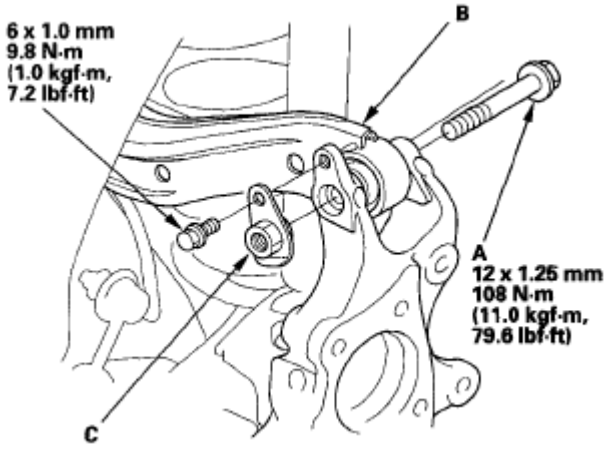

Fig. 13: Identifying Mounting Bolt (With Torque Specifications)

6. Remove the rear knuckle upper bracket (C).
7. Mark the cam positions of the adjusting bolt (A) and the adjusting cam (B), then remove the self-locking nut (C), the adjusting cam, and the adjusting bolt. Discard the self-locking nut.

NOTE: Use a new self-locking nut during reassembly.

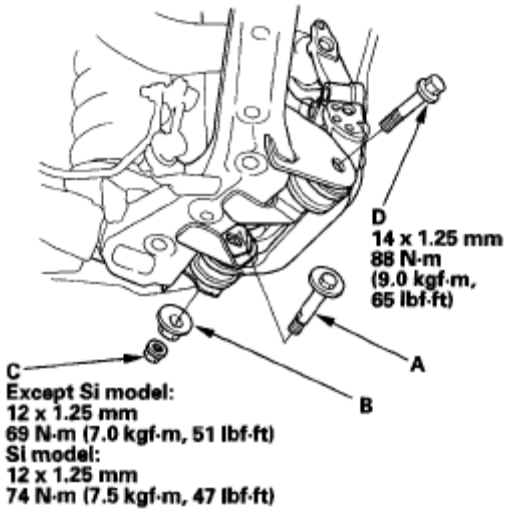

Fig. 14: Identifying Adjusting Bolt, Cam And Self Locking Nut (With Torque Specifications)

8. Remove the flange bolt (D) and remove the knuckle.

NOTE: Use a new flange bolt during reassembly.

9. Install the knuckle in the reverse order of removal, and note these items:
   - First install all the suspension components, and lightly tighten the bolts and nuts, then place a floor jack under the lower arm, and raise the suspension to load it with the vehicle's weight before fully tightening the bolts and nuts to the specified torque values.
   - Align the cam positions of the adjusting bolt and the adjusting cam with the marked positions when tightening.
   - Before installing the brake disc, clean the mating surface of the hub bearing unit and the inside of the brake disc.
   - Before installing the wheel, clean the mating surface of the brake disc and the inside of the wheel.
   - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

KNUCKLE REPLACEMENT-DRUM BRAKE TYPE

1. Remove the hub bearing unit.

2. Disconnect the brake line (A) from the wheel cylinder (B). Remove the rear brake assembly (C) from the knuckle.

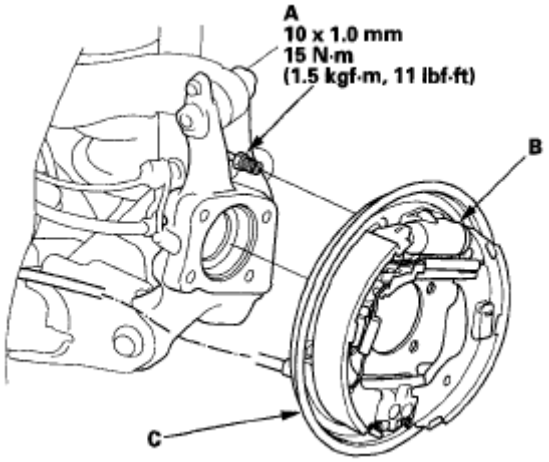

Fig. 15: Identifying Rear Brake Assembly From Knuckle (With Torque Specifications)

3. Remove the wheel sensor (A), and the brake hose mounting bracket (B) from the knuckle (C). Do not disconnect the wheel sensor connector.

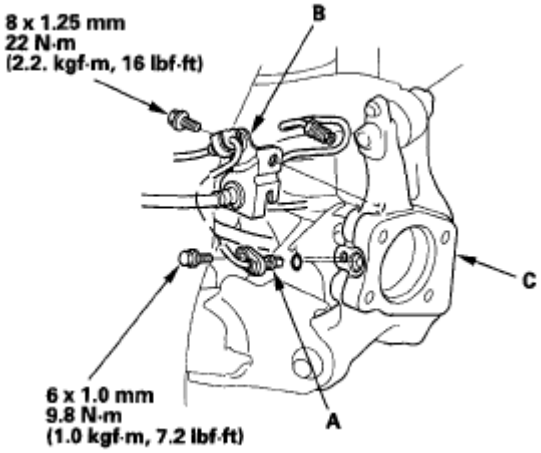

Fig. 16: Identifying Wheel Sensor, Brake Hose Mounting Bracket From Knuckle (With Torque Specifications)

4. Place a floor jack under the trailing arm to support it.

NOTE: Do not place the jack against the plate section of the

lower arm. Be careful not to damage any suspension components.

5. Remove the upper arm mounting bolt (A), and disconnect the upper arm (B) from the knuckle.

NOTE: Use a new upper arm mounting bolt during reassembly.

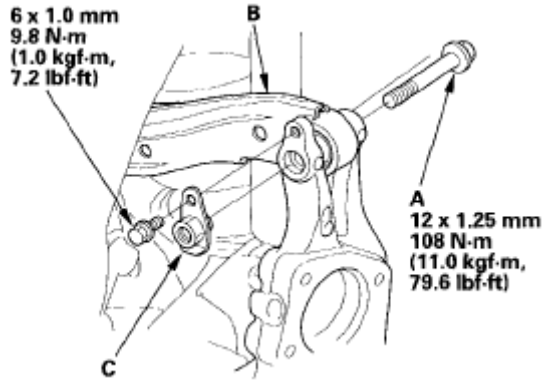

Fig. 17: Identifying Upper Arm Mounting Bolt (With Torque Specifications)

6. Remove the rear knuckle upper bracket (C).
7. Mark the cam positions of the adjusting bolt (A) and the adjusting cam (B), then remove the self-locking nut (C), the adjusting cam, and the adjusting bolt. Discard the self-locking nut.

NOTE: Use a new self-locking nut during reassembly.

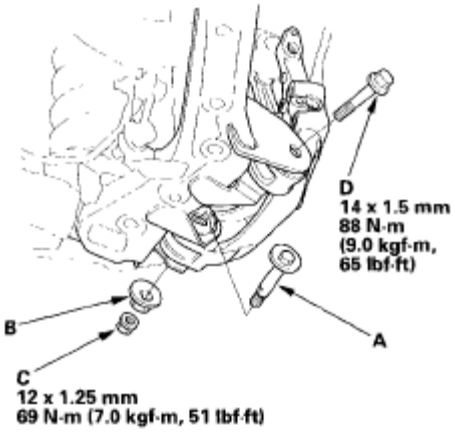

Fig. 18: Identifying Adjusting Bolt, Cam And Self Locking Nut (With Torque Specifications)

8. Remove the flange bolt (D) and remove the knuckle.

NOTE: Use a new flange bolt during reassembly.

9. Install the knuckle in the reverse order of removal, and note these items:
   - First install all the suspension components, and lightly tighten the bolts and nuts, then place a floor jack under the lower arm, and raise the suspension to load it with the vehicle's weight before fully tightening the bolts and nuts to the specified torque values.
   - Align the cam positions of the adjusting bolt and the adjusting cam with the marked positions when tightening.
   - Before installing the brake drum, clean the mating surface of the hub bearing unit and the inside of the brake drum.
   - Before installing the wheel, clean the mating surface of the brake drum and the inside of the wheel.
   - Fill the master cylinder reservoir to the MAX (upper) level line, and bleed the brake system (see **BRAKE SYSTEM BLEEDING**). Check for a leak at the brake line to the wheel cylinder, and retighten it if necessary.
   - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

UPPER ARM REMOVAL/INSTALLATION

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Position a floorjack at the connecting point of the trailing arm (A) and the knuckle (B).

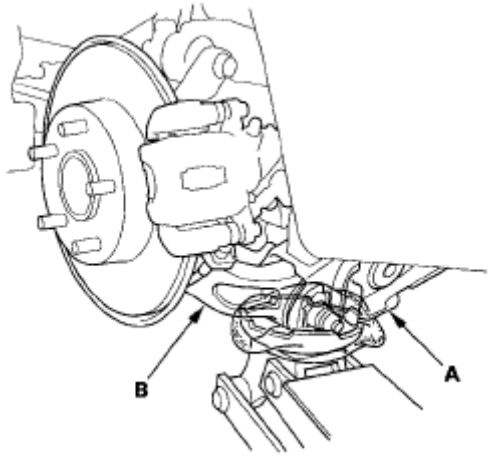

Fig. 19: Identifying Trailing Arm And Knuckle

4. Remove the flange bolts (A) from the vehicle.

NOTE: Use the new flange bolts during reassembly.

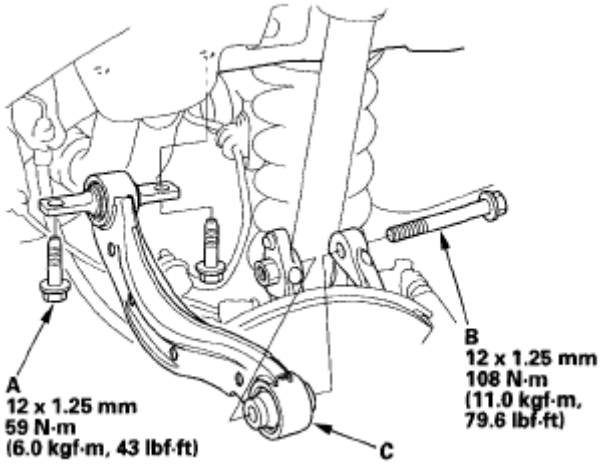

Fig. 20: Identifying Flange Bolts From Vehicle (With Torque Specifications)

5. Remove the flange bolt (B) from the knuckle, and remove the upper arm (C).

NOTE: Use the new flange bolt during reassembly.

6. Install the upper arm in the reverse order of removal, and note these items:
   - Tighten all mounting hardware to the specified torque values.
   - First install all the components, and lightly tighten the bolts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
   - Before installing the wheel, clean the mating surface of the brake disc or the brake drum and the inside of the wheel.
   - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

TRAILING ARM REMOVAL/INSTALLATION

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the rear under cover (see **MIDDLE FLOOR UNDERCOVER REPLACEMENT**).
4. Remove the parking brake cable (A) from the trailing arm (B).

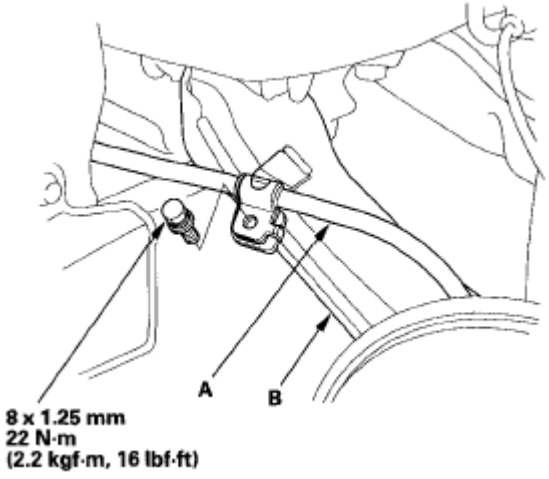

Fig. 21: Identifying Parking Brake Cable From Trailing Arm (With

Torque Specifications)

5. Position a floor jack at the connecting point of the trailing arm.

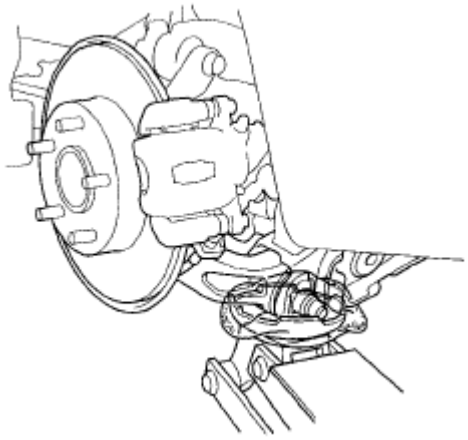

Fig. 22: Identifying Trailing Arm

6. Remove the knuckle, disc type (see **KNUCKLE REPLACEMENT-DISC BRAKE TYPE**), drum type (see **KNUCKLE REPLACEMENT-DRUM BRAKE TYPE**).
7. Remove the stabilizer link from the trailing arm (see **STABILIZER LINK REMOVAL/INSTALLATION**).
8. Remove the spring (see **SPRING REPLACEMENT**).
9. Remove the trailing arm rear mounting bolt (A).

NOTE: Use a new mounting bolt during reassembly.

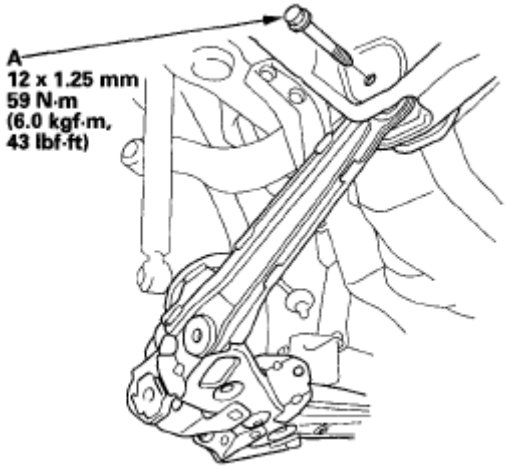

Fig. 23: Identifying Trailing Arm Rear Mounting Bolt (With Torque Specifications)

10. Lower the jack, and remove the trailing arm.
11. Install the trailing arm in the reverse order of removal, and note these items:
    - Tighten all mounting hardware to the specified torque values.
    - First install all the components, and lightly tighten the bolts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque values.
    - Check the brake hose for interference and twisting.
    - Before installing the wheel, clean the mating surface of the brake disc or the brake drum and the inside of the wheel.
    - Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

STABILIZER LINK REMOVAL/INSTALLATION

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the self-locking nut (A) and the flange nut (B) while holding the respective joint pin (C) with a hex wrench (D), then remove the stabilizer link (E).

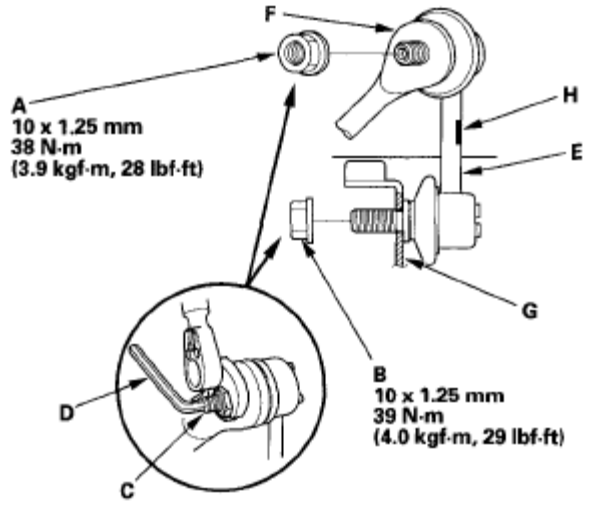

Fig. 24: Identifying Self-Locking Nut And Flange Nut (With Torque Specifications)

4. Install the stabilizer link on the stabilizer bar (F) and trailing arm (G) with the joint pins set at the center of their range of movement.

NOTE: The stabilizer link has a paint mark (H). Align the paint mark on the stabilizer link facing rearward.

5. Install a new self-locking nut and a new flange nut, and lightly tighten them.
6. Place a floor jack under the trailing arm, and raise the suspension to load it with the vehicle's weight.
7. Tighten the self-locking nut and flange nut to the specified torque values while holding the respective joint pins with a hex wrench.
8. Reinstall all removed parts and test-drive the vehicle.
9. After 5 minutes of driving, torque the self-locking nut again to the specified torque value.

STABILIZER BAR REPLACEMENT

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheels.
3. Disconnect both stabilizer links from the stabilizer bar (see **STABILIZER**

LINK REMOVAL/INSTALLATION).

4. Remove the flange bolts (A) and the bushing holders (B), then remove the bushings (C) and the stabilizer bar (D).

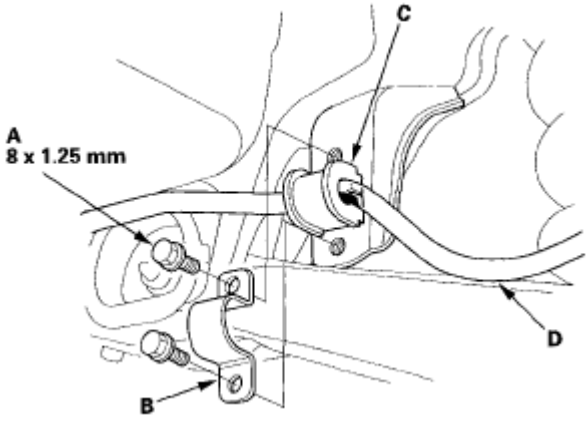

Fig. 25: Identifying Flange Bolts And Bushing Holders

5. Remove the flange bolts (A) and the stabilizer bar bracket (B) if necessary.

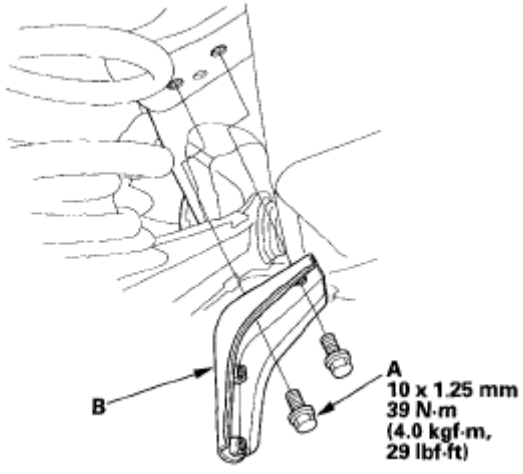

Fig. 26: Identifying Flange Bolts And Stabilizer Bar Bracket (With Torque Specifications)

6. Install the stabilizer bar in the reverse order of removal, and note these items:
   - Note the right and left direction of the stabilizer bar.
   - Align the paint marks (A) on the stabilizer bar with the sides of the bushings.

- Refer to stabilizer link removal/installation to connect the stabilizer bar to the links (see **STABILIZER LINK REMOVAL/INSTALLATION**).
- Before installing the wheel, clean the mating surfaces on the brake disc or the brake drum and inside of the wheel.
- Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

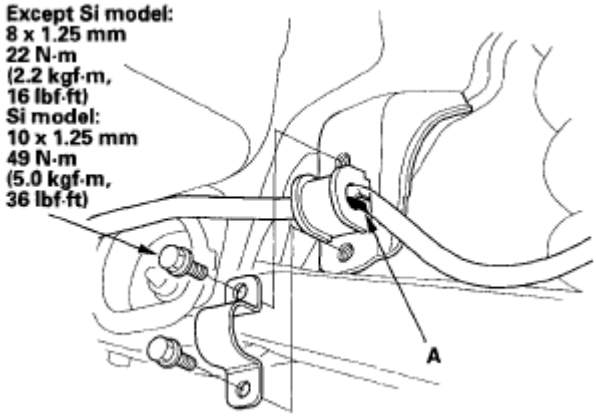

Fig. 27: Identifying Paint Marks (With Torque Specifications)

DAMPER REPLACEMENT

EXPLODED VIEW

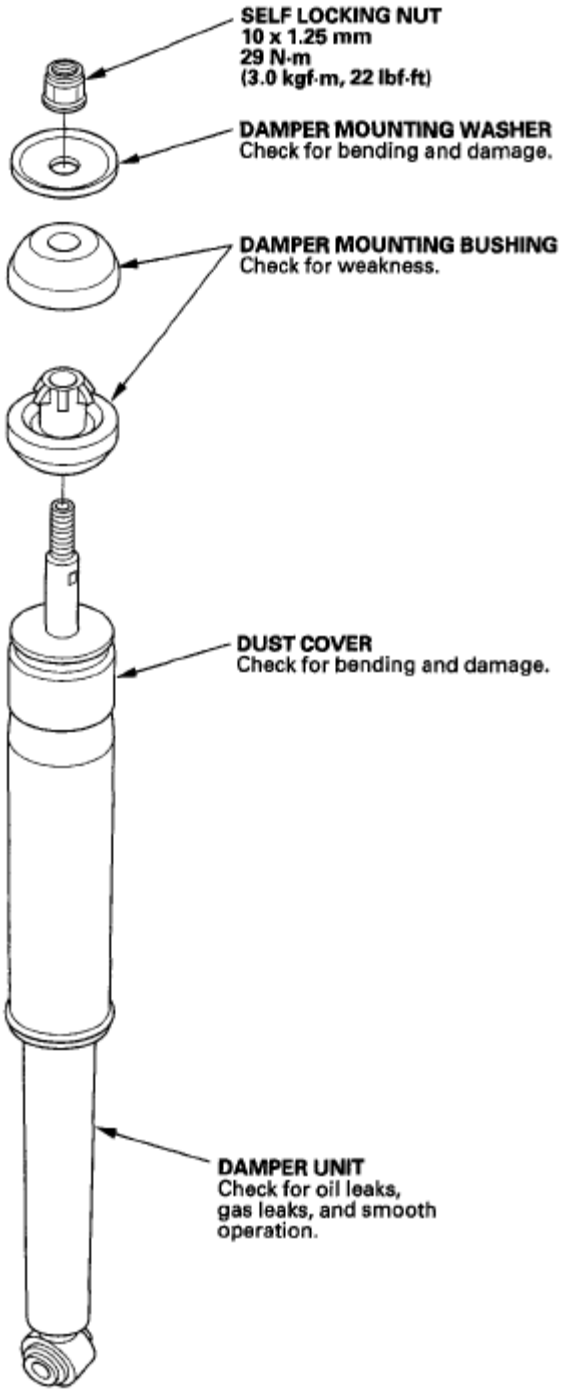

Fig. 28: Exploded View Of Damper Components (With Torque Specifications)

REMOVAL

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).

2. Remove the rear wheel.
3. Position a floor jack at the connecting point of the trailing arm (A) and the knuckle (B). Raise the floor jack until the suspension begins to compress.

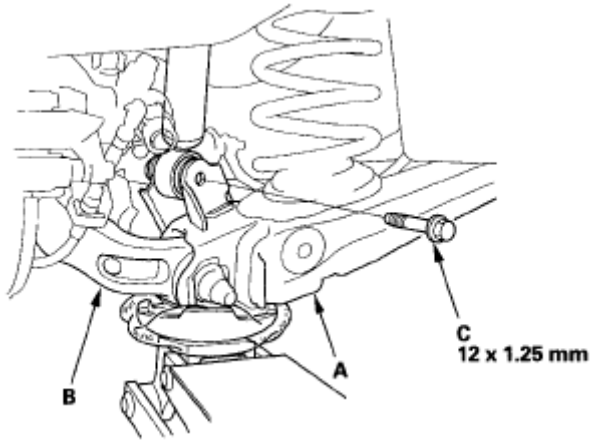

Fig. 29: Identifying Flange Bolt

4. Remove the flange bolt (C) from the bottom of the damper.
5. Remove the trunk side trim panel, 2-door (see **TRIM REMOVAL/INSTALLATION - TRUNK AREA**), 4-door (see **4-DOOR**).
6. Remove the self-locking nut (A) while holding the damper shaft (B) with a hex wrench (C).

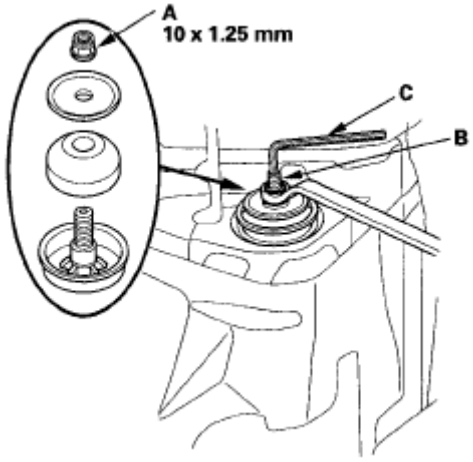

Fig. 30: Identifying Self-Locking Nut

7. Compress the damper unit (A) by hand, and remove it from the vehicle.

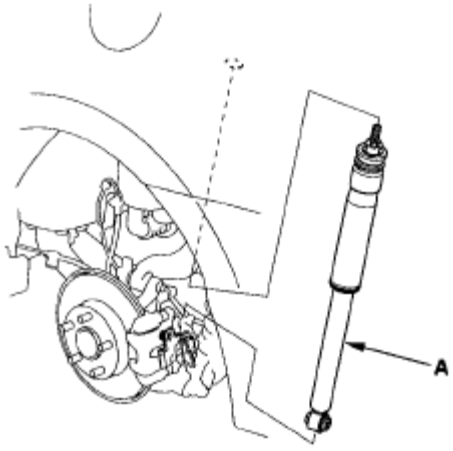

Fig. 31: Identifying Compress Damper Unit By Hand

INSPECTION

1. Push on the damper as shown.

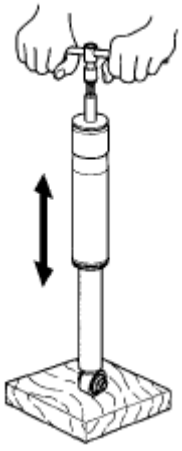

Fig. 32: Pushing On Damper

2. Compress the damper assembly by hand, and check for smooth operation through a full stroke, both compression and extension. The damper should extend smoothly and constantly when compression is released. If it does not, the gas is leaking and the damper should be replaced.
3. Check for oil leaks, abnormal noises, or binding during these tests.

INSTALLATION

1. Install the damper mounting bushing (A) onto the damper unit. Position the

damper assembly (B) between the body and trailing arm. Be careful not to damage the body.

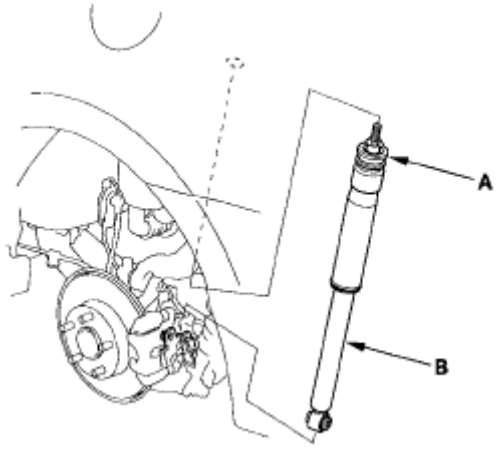

Fig. 33: Identifying Damper Mounting Bushing Onto Damper Unit

2. Position a jack under the trailing arm to support the suspension, then install a new damper mounting bolt (A).

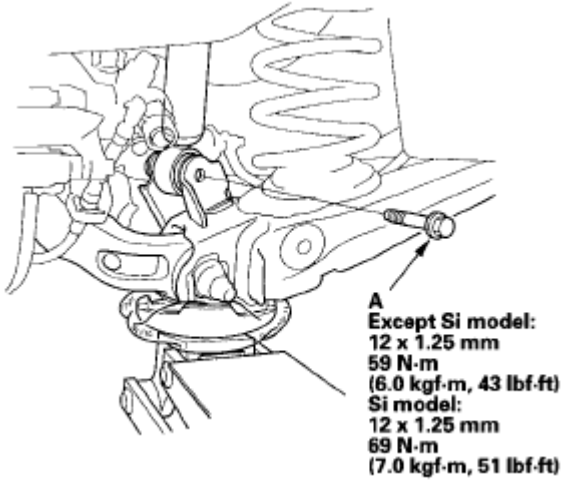

Fig. 34: Identifying Damper Mounting Bolt (With Torque Specifications)

3. Loosely tighten the damper mounting bolt.
4. Raise the rear suspension with the jack until the vehicle just lifts off the safety stands, then tighten the damper mounting bolt to the specified torque value.
5. Install the damper mounting bushing (A), the damper mounting washer (B), and a new self-locking nut (C) on the damper shaft.

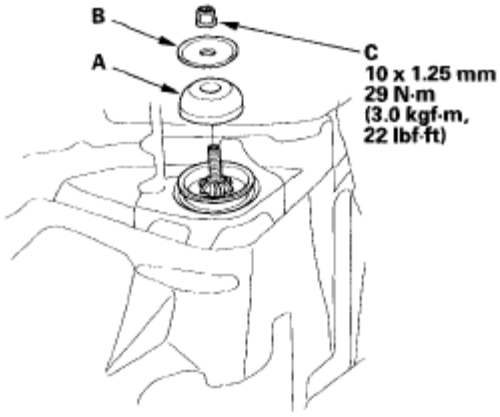

Fig. 35: Identifying Damper Mounting Bushing (With Torque Specifications)

6. Tighten the self-locking nut to the specified torque value while holding the damper shaft (A) with a hex wrench (B).

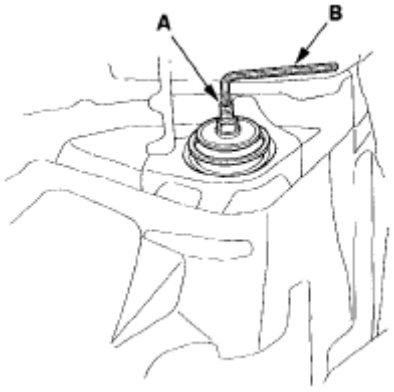

Fig. 36: Tightening Self-Locking Nut (With Torque Specifications)

7. Install the trunk side trim panel, 2-door (see **TRIM REMOVAL/INSTALLATION - TRUNK AREA**), 4-door (see **4-DOOR**).
8. Install the rear wheel.

NOTE: Before installing the wheel, clean the mating surface of the brake disc or brake drum and the inside of the wheel.

9. Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).

SPRING REPLACEMENT

EXPLODED VIEW

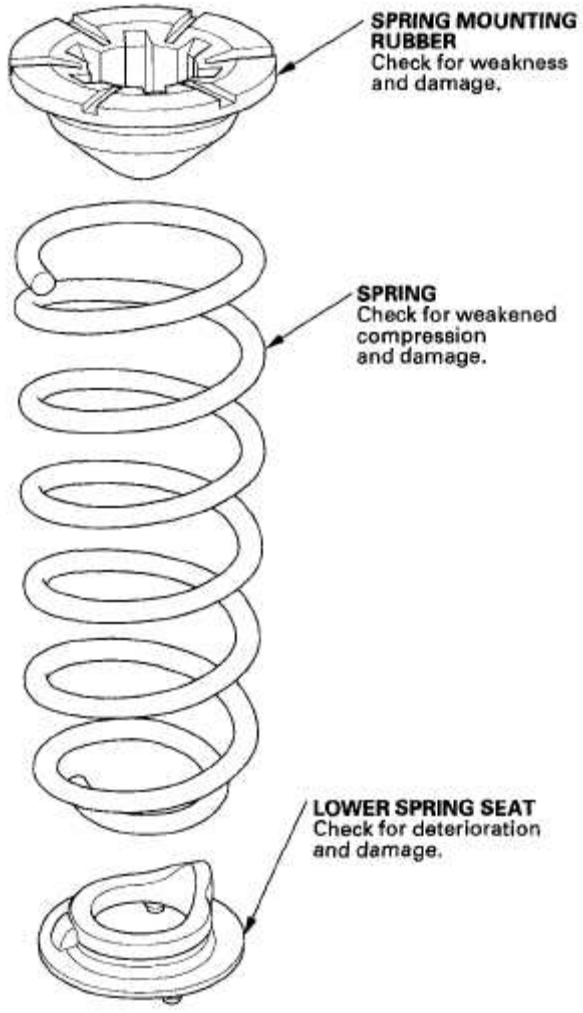

Fig. 37: Exploded View Of Spring Replacement

REMOVAL

1. Raise the rear of the vehicle, and support it with safety stands in the proper locations (see **LIFT AND SUPPORT POINTS**).
2. Remove the rear wheel.
3. Remove the wheel sensor (A) from the knuckle (B). Do not disconnect the wheel sensor connector.

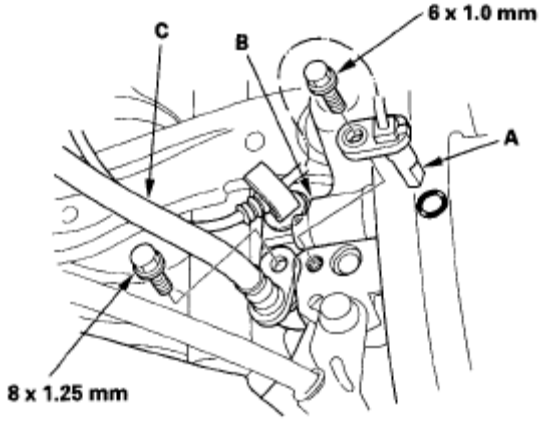

Fig. 38: Identifying Wheel Sensor And O-Ring

4. Remove the brake hose (C).
5. Position a floor jack at the connecting point of the trailing arm and the knuckle.
6. Remove the flange bolt (A) that connects the trailing arm (B) and the damper (C).

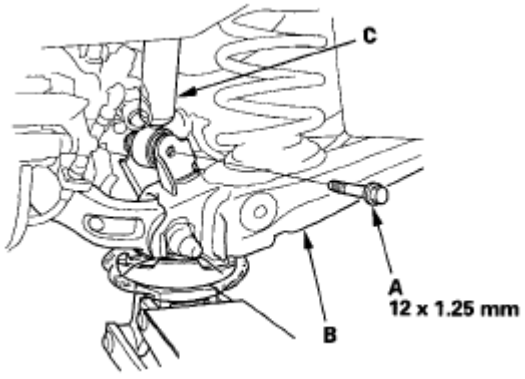

Fig. 39: Identifying Flange Bolt

7. Remove the stabilizer link from the trailing arm (see **STABILIZER LINK REMOVAL/INSTALLATION**).
8. Remove the flange bolt (A) that connects the knuckle (B) and the upper arm (C).

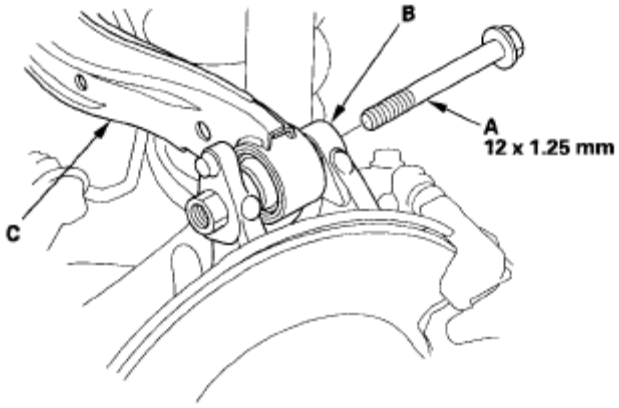

Fig. 40: Identifying Flange Bolt

9. Remove the trailing arm front mounting bolts (A).

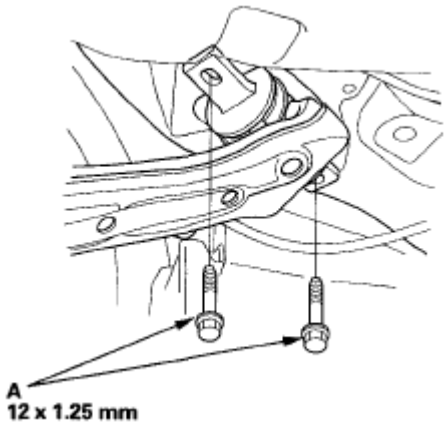

Fig. 41: Identifying Trailing Arm Front Mounting Bolts

10. Lower the floor jack gradually.
11. Remove the spring mounting rubber (A), the spring (B) and the lower spring seat (C).

NOTE: If the clip is installed inside the spring mounting rubber, discard it.

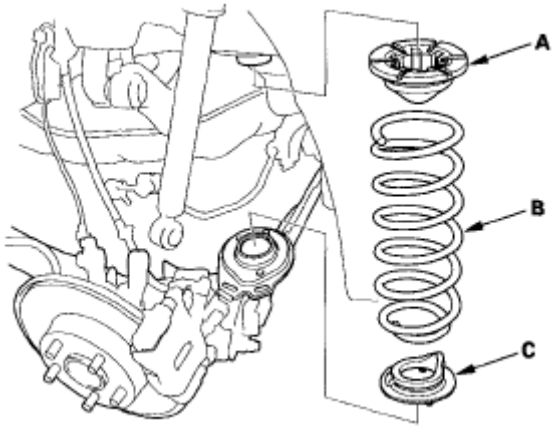

Fig. 42: Identifying Spring Mounting Rubber

INSTALLATION

1. Install the spring mounting rubber (A), the spring (B) and the lower spring seat (C).

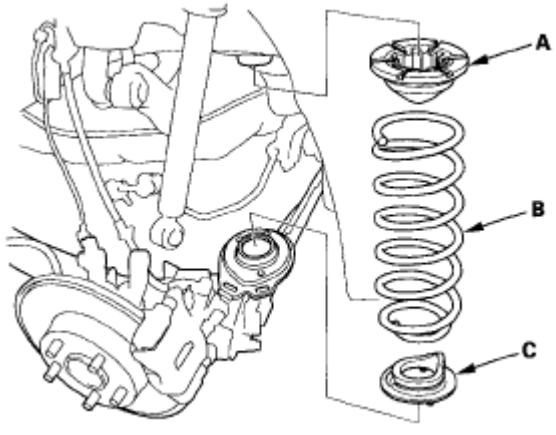

Fig. 43: Identifying Spring Mounting Rubber

2. Align the bottom of the spring (A) and the lower spring seat (B) with the trailing arm (C) as shown.

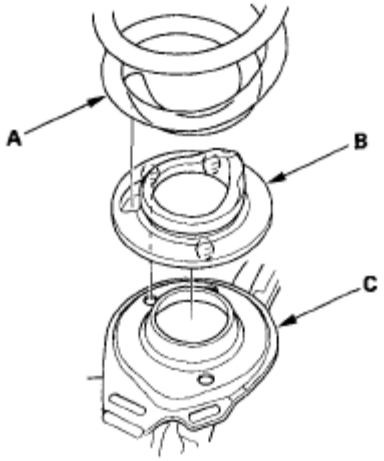

Fig. 44: Aligning Bottom Of Spring

3. Loosely install the new trailing arm front mounting bolts (A).

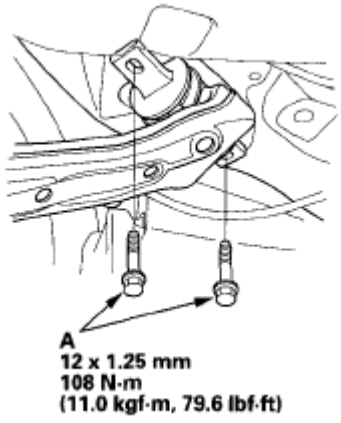

Fig. 45: Identifying Trailing Arm Front Mounting Bolts (With Torque Specifications)

4. Loosely install a new flange bolt (A) on the knuckle (B) and the upper arm (C).

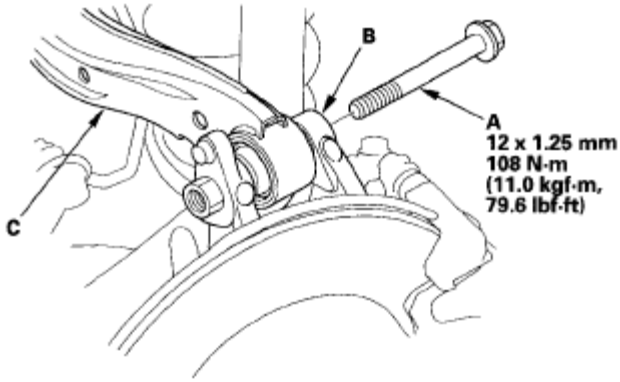

Fig. 46: Identifying Flange Bolt (With Torque Specifications)

5. Slowly raise the jack until you can align the bolt hole with the holes in the trailing arm (A) and the damper (B), and install a new flange bolt (C).

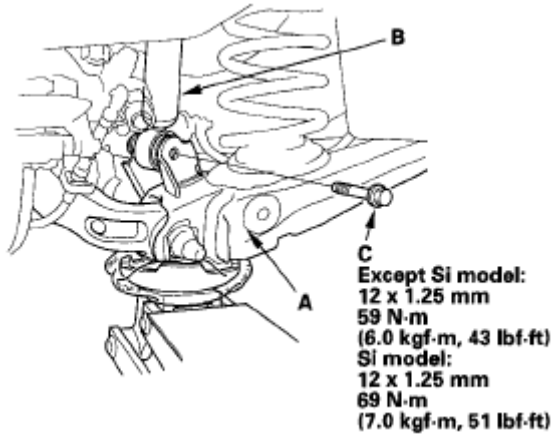

Fig. 47: Identifying Flange Bolt (With Torque Specifications)

6. Install the stabilizer link on the trailing arm with a new self-locking nut, and lightly tighten both nuts.
7. Raise the rear suspension with a floor jack to load the vehicle weight.
8. Tighten all mounting hardware to the specified torque values. For stabilizer link torque specifications (see **STABILIZER LINK REMOVAL/INSTALLATION**).
9. Install the wheel sensor (A) and the brake hose (B).

NOTE: Apply multipurpose grease to the mating surfaces on the knuckle and the O-ring (C).

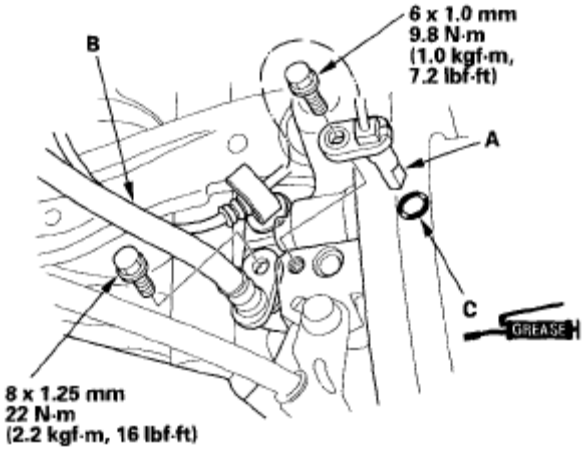

Fig. 48: Identifying Wheel Sensor And Brake Hose (With Torque Specifications)

10. Install the rear wheel.

NOTE: Before installing the wheel, clean the mating surface of the brake disc or the brake drum and inside of the wheel.

11. Check the wheel alignment, and adjust it if necessary (see **WHEEL ALIGNMENT**).